



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

11A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,467	02/01/2005	Joerg Stierle	3192	1181
7590 Striker Striker & Stenby 103 East Neck Road Huntington, NY 11743		07/13/2007	EXAMINER RADKOWSKI, PETER	
			ART UNIT 2883	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,467	Applicant(s) STIERLE ET AL.	
	Examiner Peter Radkowski	Art Unit 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/1/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/1/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Office Action

Claim Objections

1. Claims 6-16 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n).

- Claim 1 is an independent claim.
- Claims 2 – 4 are dependent claims, each having a singular dependency upon “claim 1.”
- Claim 5 is multiple dependent upon “one of claims 2 through 4.”
- Claim 6 is multiple dependent upon “one of claims 2 through 5.”
- Claim 7 is multiple dependent upon “one of claims 1 through 6.”
- Claims 8-10 and 13 are dependent upon “claim 7,” which is a multiple dependent claim that further references multiple dependent claims.
- Claim 11 is dependent upon “claim 10,” which is dependent upon “claim 7,” which is a multiple dependent claim that further references multiple dependent claims.
- Claim 12 is dependent upon “claim 11,” which is dependent upon “claim 10,” which is dependent upon “claim 7,” which is a multiple dependent claim that further references multiple dependent claims.
- Claim 14 is dependent upon “claim 13,” which is dependent upon “claim 7,” which is a multiple dependent claim that further references multiple dependent claims.
- Claims 15 and 16 are multiple dependent upon “one of claims 1 though 14.”

Art Unit: 2883

However, by construing Claims 6-16 to include all limitations of the claims incorporated (directly or indirectly) by reference into the dependent claim, Claims 6-16 have been further treated on the merits. **(See Below)**

2. Claims 1 – 16 are objected to because the recitation in line 3, “the buttresses (43) are embodied such that *on the one hand*, ... [limitation A] ... , and *on the other*, ... [limitation B] ... ,” (emphasis added) is unclear. It is unclear if applicant intends limitation A and limitation B; limitation A or limitation B; or limitation A and/or limitation B. Claims 2-16 are objected to because they inherit the deficiencies of Claim 1. Appropriate action is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 2883

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1

5. **Claim 1 is rejected** under 35 U.S.C. 103(a) as being obvious over Reeder (5,590,149), in view of Met (3,478,608).

Regarding Claim 1, Reeder teaches a device for adjusting an optical mirror [not shown], having mirror holder [10] that receives the mirror (not shown but inherent to the shown mirror mounting aperture [20]) and is retained on a holder profile section [12], and having three adjusting pins ([24], [24], and [32]), which pass through holes ([14], [14], and third hole associated with [32] that is shown but not labeled), and which are axially adjustable relative to the mirror holder [10] and are braced by their base points (shown but not labeled) on buttresses embodied on the holder profile section, which are equivalent to the bushings [26] that are positioned in the holes [14], characterized in that the buttresses are embodied such that on the one hand, the buttresses center the mirror holder via the adjusting pins, and on the other, at least two buttresses allow the base point of the respective adjusting pin to shift radially outward. (See Reeder, figs. 1 and 2; and col. 3, lines 50-55)

Further regarding Claim 1, Reeder does not explicitly teach that the three adjusting pins are offset from one another in the circumferential direction in the mirror holder.

However, Met teaches a bolt circle that is concentric with the center axis of the optic device. (See Met, col. 2, lines 10-13, and figs. 1, 2, and 3)

Since Reeder and Met both teach alignment and mounting devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder to have concentric pattern taught by Met because the mirror holder can be tilted about any resultant axis intersecting its center axis at right angles provided the bolt circle is concentric with said center axis. (See Met, col. 2, lines 10-13) One would have been motivated to make this modification because the ability to tilt at all axes may make it more likely that the optical device will be properly aligned.

Claims 1 - 5

6. **Claims 1 – 5 are rejected** under 35 U.S.C. 103(a) as being obvious over Reeder (5,590,149), in view of Met (3,478,608), and further in view of Brueck (2,129,562).

Regarding Claim 1, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses. (See Above)

Regarding Claim 2, Reeder in view of Met, as applied to Claim 1, teaches that one buttress is embodied as a blind bore ([14] and [36]); (See Reeder, fig. 1); and one buttress is formed by a flat face [4]; (See Met, fig. 3)

Since Reeder and Met both teach alignment and mounting devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, to have the flat face buttress configuration taught by Met because the tolerance of the flat face configuration determines the range of adjustment of the system. (See Met, col. 4, ll. 56-57) One would have been motivated to make this modification because an

Art Unit: 2883

increased range of adjustment may make it more likely that the optical device will be properly aligned.

Further regarding Claim 2, Reeder, in view of Met, does not explicitly teach that one buttress is embodied as a radial longitudinal groove.

However, Brueck teaches an optical device assembly comprising an actuating disk [26], which comprises a plurality of radial slots [25]. (See Brueck, figs. 4 and 6)

Since Reeder, Met, and Brueck teach alignment devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, to have the radial slot configuration taught by Brueck because which facilitates adjustment of the optical assembly. (See Brueck, col. 2, ll. 21-25) One would have been motivated to make this modification because an increased ease of adjustment may make it more likely that the optical device will be properly aligned.

Regarding Claim 3, Reeder in view of Met, as applied to Claim 1, teaches that one buttress is embodied as a blind bore ([14] and [36]); (See Reeder, fig. 1).

Further regarding Claim 3, Reeder, in view of Met, does not explicitly teach that two other buttresses are each embodied as a radial longitudinal groove.

However, Brueck teaches an optical device assembly comprising an actuating disk [26], which comprises a plurality of radial slots [25]. (See Brueck, figs. 4 and 6)

Since Reeder, Met, and Brueck teach alignment devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, to have the radial slot configuration taught by Brueck because which facilitates adjustment of the optical assembly. (See Brueck, col. 2, ll. 21-25) One would have been

Art Unit: 2883

motivated to make this modification because an increased ease of adjustment may make it more likely that the optical device will be properly aligned.

Regarding Claim 4, Reeder, in view of Met, as applied to Claim 1, does not explicitly teach that all three buttresses are each embodied as a radial longitudinal groove.

However, Brueck teaches an optical device assembly comprising an actuating disk [26], which comprises a plurality of radial slots [25]. (See Brueck, figs. 4 and 6)

Since Reeder, Met, and Brueck teach alignment devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, to have the radial slot configuration taught by Brueck because which facilitates adjustment of the optical assembly. (See Brueck, col. 2, ll. 21-25) One would have been motivated to make this modification because an increased ease of adjustment may make it more likely that the optical device will be properly aligned.

Regarding Claim 5, Reeder, in view of Met, and further in view of Brueck, as applied to any of Claims 2 through 4, does not explicitly teach that the inside diameter of the blind bore and/or the width of the radial longitudinal groove is dimensioned such that the base point of the adjusting pin is received in the blind bore or in the radial longitudinal groove, respectively, in the circumferential direction with slight play in each case.

However, Met teaches a configuration of tolerances (imperfect fits) between pins and buttresses.

Since Reeder, Met, and Brueck teach alignment devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, and further in view of Brueck, to have the imperfect fit of Met because “play”

Art Unit: 2883

rather than mere “geometry” controls the alignment of the mirror. (See Met., col. 2, ll. 24-29)

One would have been motivated to make this modification because an increased ease of adjustment may make it more likely that the optical device will be properly aligned.

Claims 1 – 8

7. **Claims 1 – 8 are rejected** under 35 U.S.C. 103(a) as being obvious over Reeder (5,590,149), in view of Met (3,478,608), further in view of Brueck (2,129,562), and further in view of Tibbals (3,436,050).

Regarding Claim 1, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses. (See Above)

Regarding Claim 2, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses whose configurations limits Claim 1. (See Above)

Regarding Claims 3 - 5, Reeder, in view of Met, and further in view of Brueck, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses, whose configurations limit Claim 1 but which differ from Claim 2’s buttresses. (See Above)

Regarding Claim 6, Reeder, in view of Met, and further in view of Brueck, as applied to Claims 2 through 5, does not explicitly teach that the base regions of the adjusting pins are embodied in domelike or conical form and rest on a preferably chamfered peripheral region of the blind bores and/or of the radial longitudinal grooves.

Art Unit: 2883

However, Tibbals teaches domelike adjusting pins [54] whose bases' rest on chamfered regions [55] of the buttresses. (See Tibbals, figs. 5 and 7)

Since Reeder, Met, Brueck, and Tibbals teach alignment devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, and further in view of Brueck, to have the configuration of Tibbals because this guards against unintended in situ rotation of the pins. (See Tibbals, col. 4, ll. 55-59). One would have been motivated to make this modification because prevention of unintended motion of the adjusting pins may make it more likely that the optical device will be properly aligned.

Regarding Claim 7, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, as applied to one of Claims 1 through 6, teaches that the adjusting pins [34] are embodied as threaded pins, and the through holes [14] are embodied as threaded bores; and the threads mesh with one another without play.

Regarding Claim 8, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, as applied to Claim 7, teaches that the thread of the adjusting pins and/or the thread of the threaded bores is coated with plastic. Specifically, Tibbals teaches that the interface between the threads is coated by a high film strength lubricant which, under stress, would be functionally equivalent to a coating of plastic.

Since Reeder, Met, Brueck, and Tibbals teach alignment devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals to have the high film strength coating of Tibbals because this provides for zero backlash in the adjusting

Art Unit: 2883

mechanisms. (See Tibbals, col. 5, ll. 60-65) One would have been motivated to make this modification because prevention of unintended motion of the adjusting pins may make it more likely that the optical device will be properly aligned.

Claims 1 – 7, and 9

8. **Claims 1 – 7 and 9 are rejected** under 35 U.S.C. 103(a) as being obvious over Reeder (5,590,149), in view of Met (3,478,608), further in view of Brueck (2,129,562), further in view of Tibbals (3,436,050), and further in view of Isenberg (6,910,841).

Regarding Claim 1, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses. (See Above)

Regarding Claim 2, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses whose configurations limits Claim 1. (See Above)

Regarding Claims 3 - 5, Reeder, in view of Met, and further in view of Brueck, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses, whose configurations limit Claim 1 but which differ from Claim 2's buttresses. (See Above)

Regarding Claim 6, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, teaches that the adjusting pins are embodied as threaded pins, and the through holes [are embodied as threaded bores; and the threads mesh with one another without play. (See Above)

Art Unit: 2883

Regarding Claim 7, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, teaches that the thread of the adjusting pins and/or the thread of the threaded bores is coated with plastic. **(See Above)**

Regarding Claim 9, Reeder, in view of Met, further in view of Brueck, further in view of Tibbals, as applied to Claim 7, fails to teach that the thread of the adjusting pins is embodied as self-forming.

However, Isenberg teaches a thread-forming screw [10]. (See Isenberg, fig. 1)

Since Reeder, Met, Brueck, Tibbals, and Isenberg teach attachments subject to motion, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals to have the screw configuration of Isenberg this configuration increases friction and may avoid loosening of the screw in the bore. (See Isenberg, col. 1, ll. 40-42). One would have been motivated to make this modification because prevention of unintended loosening of attachment points may make it more likely that the optical device will be properly aligned.

Claims 1 – 7, and 10 - 12

9. **Claims 1 –7 and 10 - 12 are rejected** under 35 U.S.C. 103(a) as being obvious over Reeder (5,590,149), in view of Met (3,478,608), further in view of Brueck (2,129,562), further in view of Tibbals (3,436,050), and further in view of Cresswell (2002/0050716).

Regarding Claim 1, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses. **(See Above)**

Art Unit: 2883

Regarding Claim 2, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses whose configurations limits Claim 1. (See Above)

Regarding Claims 3 - 5, Reeder, in view of Met, and further in view of Brueck, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses, whose configurations limit Claim 1 but which differ from Claim 2's buttresses. (See Above)

Regarding Claim 6, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, teaches that the adjusting pins are embodied as threaded pins, and the through holes [are embodied as threaded bores; and the threads mesh with one another without play. (See Above)

Regarding Claim 7, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, teaches that the thread of the adjusting pins and/or the thread of the threaded bores is coated with plastic. (See Above)

Regarding Claims 10, 11, and 12, Reeder, in view of Met, further in view of Brueck, further in view of Tibbals, as applied to Claim 7, fails to teach: a spring element such that the adjusting pins are acted upon with a radial pressure force by the spring element resting on all the adjusting pins; (as recited in Claim 10); a snap ring, which spreads apart under initial tension and which rests inside the pitch circle defined by the adjusting pins and acts upon the adjusting pins with a radially outward-oriented pressure force; (as recited in Claim 11); or that the snap ring has a twist preventer; (as recited in Claim 12).

However, Cresswell teaches two spring elements which exert radial forces, **(as recited in Claim 10): a snap ring [70], (as recited in Claim 11); and a twist ring [66]; (as recited in Claim 12).**

Since Reeder, Met, Brueck, Tibbals, and Cresswell teach attachments subject to motion, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals to have the spring elements of Cresswell because this configuration frustrates the loosening of the male screw from the female bore. (See Creswell, p. 5, par. [0045], ll. 26- 30.) One would have been motivated to make this modification because prevention of unintended loosening of attachment points may make it more likely that the optical device will be properly aligned.

Claims 1 – 7, and 13 - 14

10. **Claims 1 –7 and 13 - 14 are rejected** under 35 U.S.C. 103(a) as being obvious over Reeder (5,590,149), in view of Met (3,478,608), further in view of Brueck (2,129,562), further in view of Tibbals (3,436,050), and further in view of Kaplan (3,171,322).

Regarding Claim 1, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses. **(See Above)**

Regarding Claim 2, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses whose configurations limits Claim 1. **(See Above)**

Regarding Claims 3 - 5, Reeder, in view of Met, and further in view of Brueck, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses, whose configurations limit Claim 1 but which differ from Claim 2's buttresses. (See Above)

Regarding Claim 6, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, teaches that the adjusting pins are embodied as threaded pins, and the through holes [are embodied as threaded bores; and the threads mesh with one another without play. (See Above)

Regarding Claim 7, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, teaches that the thread of the adjusting pins and/or the thread of the threaded bores is coated with plastic. (See Above)

Regarding Claim 13, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, as applied to Claim 7, teaches one spring element engages each adjusting pin with radially oriented pressure force. Specifically, Reeder teaches elastic dimples [36] which conform to the shape of the adjusting pins [24] and which provide for precise optical alignment when there is vibration, shock, or changes in temperature.

Regarding Claim 14, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, as applied to Claim 13, does not explicitly teach that the spring element is embodied as an axially slit clamping sleeve, which is inserted into a receiving hole made in the mirror holder; and the receiving hole has a radial spacing from the threaded bore such that the clamping sleeve presses radially against the adjusting pin.

Art Unit: 2883

However, Kaplan teaches a sleeve [10] with a split (aperture [11]) which anchors a threaded object (bolt [13]) in a pre-drilled hole (not shown but inherent to the description). (See Kaplan, fig. 1)

Since Reeder, Met, Brueck, Tibbals, and Kaplan teach attachments subject to motion, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals to have the split-sleeve configuration of Kaplan because this configuration engages the threaded features [14] of the bolt [13]. (See Kaplan, col. 2, ll. 32-33) One would have been motivated to make this modification because prevention of unintended loosening of threaded attachment points may make it more likely that the optical device will be properly aligned.

Claims 1-16

11. **Claims 1-16 are rejected** under 35 U.S.C. 103(a) as being obvious over Reeder (5,590,149), in view of Met (3,478,608), further in view of Brueck (2,129,562), further in view of Tibbals (3,436,050), further in view of Isenberg (6,910,841), further in view of Cresswell (2002/0050716), further in view of Kaplan (3,171,322), further in view of Wallace et al. (5,329,347), and further in view of Ball (GB90/00567).

Regarding Claim 1, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses. (See Above)

Regarding Claim 2, Reeder, in view of Met, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses whose configurations limits Claim 1. (See Above)

Regarding Claims 3 - 5, Reeder, in view of Met, and further in view of Brueck, teaches a device for adjusting an optical mirror, having mirror holder, three adjusting pins, and three buttresses, whose configurations limit Claim 1 but which differ from Claim 2's buttresses. (See Above)

Regarding Claim 6, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, teaches that the adjusting pins are embodied as threaded pins, and the through holes [are embodied as threaded bores; and the threads mesh with one another without play. (See Above)

Regarding Claim 7, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, teaches that the thread of the adjusting pins and/or the thread of the threaded bores is coated with plastic. (See Above)

Regarding Claims 10-12, Reeder, in view of Met, further in view of Brueck, further in view of Tibbals, and further in view of Cresswell, teaches two spring elements which exert radial forces, (as recited in Claim 10): a snap ring [70], (as recited in Claim 11); and a twist ring [66]; (as recited in Claim 12). (See Above)

Regarding Claims 13, Reeder, in view of Met, further in view of Brueck, and further in view of Tibbals, teaches one spring element engages each adjusting pin with radially oriented pressure force. (See Above)

Regarding Claim 14, Reeder, in view of Met, further in view of Brueck, further in view of Tibbals, and further in view of Kaplan, teaches a split sleeve which presses radially against the adjusting pin. (See Above)

Regarding Claims 15 and 16, Reeder, in view of Met, further in view of Brueck, further in view of Tibbals, further in view of Isenberg, further in view of Cresswell, and further in view of Kaplan does not explicitly teach that an adjustable mirror, of one of Claims 1 – 14, is used in an optical measuring instrument for contactless distance measurement, preferably in a laser distance meter: embodied as a handheld device; **(as recited in Claim 15)**; having an optical transmission path for transmitting an optical measurement signal and an optical reception path for receiving the reflected measurement signal, and having at least one deflection mirror, located in one of the optical paths, for folding the optical axis of the optical path, characterized by an adjusting device according to one of claims 1 through 14 that is associated with the deflection mirror; **(as recited in Claim 16)**.

Regarding Claim 15, however, Wallace et al. teach the use of a mirror [32] in a rangefinder device. (See Wallace, figs. 1 and 2).

Since Reeder, Met, Brueck, Tibbals, Isenberg, Cresswell, Kaplan, and Wallace et al. teach assembled devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, further in view of Brueck, further in view of Tibbals, further in view of Isenberg, further in view of Cresswell, and further in view of Kaplan to be part of the Wallace et al.'s rangefinder device because the mirror configurations contribute to both the transmission and reception functions of Wallace's device. (See Wallace et al., col. 2., ll. 33-36 and ll. 65-67) One would have been motivated to make this modification because the adjustable features of the mirrors may enhance the optical system of the range finder.

Regarding Claim 16, however, Wallace et al. teach the use of a folded-mirror [32] in a rangefinder device having at least one deflection mirror, located in one of an optical path, for folding the optical axis of the optical path. (See Wallace, figs. 1 and 2).

Since Reeder, Met, Brueck, Tibbals, Isenberg, Cresswell, Kaplan, and Wallace et al. teach assembled devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, further in view of Brueck, further in view of Tibbals, further in view of Isenberg, further in view of Cresswell, and further in view of Kaplan to be part of the Wallace et al.'s rangefinder device because the folded-mirror configurations contribute to both the transmission and reception functions of Wallace's device. (See Wallace et al., col. 2., ll. 33-36 and ll. 65-67) One would have been motivated to make this modification because the adjustable features of the mirrors may enhance the optical system of the range finder.

Further regarding Claim 16, however, Ball teaches a hand-held laser range finder [10] having an optical transmission path for transmitting an optical measurement signal [Tx] and an optical reception path for receiving the reflected measurement signal [Rx]. (See Ball, fig. 1)

Since Reeder, Met, Brueck, Tibbals, Isenberg, Cresswell, Kaplan, Wallace et al., and Ball teach assembled devices, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the device of Reeder, in view of Met, further in view of Brueck, further in view of Tibbals, further in view of Isenberg, further in view of Cresswell, further in view of Kaplan, and further in view of Wallace et al. to become part of the hand-held laser rangefinder of Ball because the adjustable mirror configuration may facilitate the sighting arrangement. (See Ball, p. 3, par. 1, ll. 1-2) One would have been motivated to make this

Art Unit: 2883

modification because the adjustable features of the mirrors may enhance the optical system of the hand-held range finder.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hobart et al. (3,866,140), Shull (3,953,113) and Kirsch (4,165,921) teach inventions relevant to the instant disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Radkowski whose telephone number is (571) 270-1613. The examiner can normally be reached on Monday - Thursday, 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font, can be reached on (517) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, See <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

Art Unit: 2883

PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call (800) 786-9199 (IN USA OR CANADA) or (571) 272-1000.

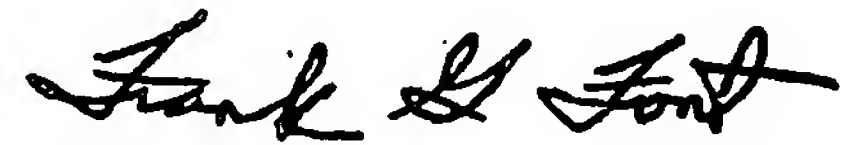


Peter Radkowski



PR

7/06/2007



Frank G. Font
Supervisory Patent Examiner
Technology Center 2800